

**I. NAVSEA PCB ADVISORY 93-1A**

**II. Subj:** MANAGEMENT OF ELECTRICAL CABLES REMOVED FROM VESSELS  
AND CRAFT (REVISED)

**III. Ref:** (a) Code of Federal Regulations, 40 CFR 761

(b) OPNAVINST 5090.1A, ENVIRONMENTAL AND NATURAL  
RESOURCES PROGRAM MANUAL

(c) NAVSEA T9SSO-AB-MAN-010, "SUBMARINE ENVIRONMENTAL  
MANAGEMENT GUIDE"

(d) NAVSEA S9086-T8-STM-010/CH-593, NAVAL SHIPS  
TECHNICAL MANUAL, CHAPTER 593, POLLUTION CONTROL

(e) NAVSEA S9593-A1-MAN-010 "SHIPBOARD MANAGEMENT  
GUIDE FOR POLYCHLORINATED BIPHENYLS (PCBs)"

(f) DOD Directive 6050.16, DoD Policy for  
Establishing and Implementing Environmental  
Standards at Overseas Installations

(g) Overseas Environmental Baseline Guidance Document,  
October, 1992, Chapter 14, POLYCHLORINATED  
BIPHENYLS

**IV. Cancellations:** NAVSEA PCB Advisory 93-1 is canceled and replaced with NAVSEA PCB Advisory 93-1A. Advisory 93-1A differs from Advisory 93-1 in that it's applicability is limited to Navy activities, ashore and afloat, performing maintenance on Navy vessels and craft. Accordingly, the section in Advisory 93-1 which addressed the management of cables by contractors has been removed in Advisory 93-1A. Locations in Advisory 93-1A that differ from Advisory 93-1 are shown by a vertical line in the right margin.

**V. Applicability:** ALL NAVY ACTIVITIES, ASHORE AND AFLOAT,  
PERFORMING MAINTENANCE ON NAVY VESSELS AND CRAFT

**VI. Background:**

1. CINCPACFLT msg 211220Z APR 93 noted that shipboard electrical cables have been found contaminated with PCBs above 50 parts per million by weight (ppm). PCBs above 50 ppm require special handling and disposal in accordance with U.S. Environmental Protection Agency rules, reference (a), and Navy rules, reference (b). CINCPACFLT requested NAVSEA provide procedures for the identification and proper disposal of these cables.

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2. PCBs have been found above the U.S. EPA regulatory limit of 50 ppm in about 24% of cables removed from Navy vessels and craft. PCBs are found in the insulation and filler materials of all kinds and sizes of cables. The average concentration found is about 1400 ppm.

3. PCBs in cables pose no direct hazard to personnel or the environment. They are tightly bound in the plastic, do not migrate to surfaces and therefore cannot be ingested. PCBs in cables do not evaporate and therefore do not present an airborne exposure risk.

4. In some circumstances, oil on cables may contain PCBs. Leaked dielectric fluid from electrical equipment, as discussed in reference (e), and grease residues from PCB-felt gaskets or sound dampening installations are potential sources.

5. PCBs were banned in all manufacturing processes by Federal EPA rules effective 1 January 1979. However, samples from cables manufactured as late as 1983 have occasionally shown PCB levels above 50 ppm.

6. Some States require special handling and disposal of materials containing PCBs at levels lower than the Federal EPA limit of 50 ppm. Local Navy environmental offices will have knowledge of such requirements.

7. Some Navy cables contain markings on the outer jacket or on a continuous marker tape under the outer jacket that identifies the manufacturer, specification number and year of manufacture.

**VII. Action:** Cables presently installed in Navy vessels and craft need not be removed or labeled because of PCBs. When cables are removed, manage them for PCBs in accordance with the steps below.

1. Cables manufactured after January 1, 1984 are free of PCBs. All low smoke cables (identified by specifications MIL-C-24643 or MIL-C-24640 as well as by the prefix "LS" in the type designation) are free of PCBs. Such cables may be handled and disposed of without PCB controls.

2. All undated cables and cables manufactured prior to January 1, 1984 may contain PCBs. Such cables shall be managed in accordance with the following:

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### a. Protective equipment:

(1) No equipment for protection from PCBs is required for handling oil free cables. For submarines, this is a change from the guidance of Section 4.1.5.3.b of reference (c). For all ships and submarines, this is a change from the requirements of Section 593-5.9.5 of reference (d).

(2) In circumstances where suspected PCB oil residues are present, wear rubber gloves and, if necessary, Tyvec or equivalent coveralls, boots and a head covering. Respiratory protection from PCBs is not required. Refer to reference (e) for a description of suitable equipment. Dispose of used disposable protective equipment as PCB-waste.

### b. Shipboard storage and labeling of removed cables by Navy personnel:

(1) Cables which may contain PCBs should be labeled with the labels shown in Figures 3-1 or 3-2 of reference (e) or Figures 1 or 2 of Section 761.45 of reference (a). Note that installed cables or cable ways need not be labeled. Cables with suspected PCB oil residues should be stored in a plastic bag or any other suitable container to minimize the potential for skin contact.

(2) Cables which are known to be free of PCBs because of manufacturing date or LS destinations require no labeling.

(3) Removed cables should be surrendered to the nearest Navy Intermediate Maintenance Activity, Ship Repair Facility, Shipyard or Defense Regional Marketing Service (DRMS) depot for subsequent handling and disposal. Forces Afloat should assure that shore personnel are fully aware of the presence or potential presence of PCBs in cables being surrendered.

### c. Management of cables removed by Navy shore facilities or received by Navy shore facilities from vessels and craft:

(1) PCB-cables removed from vessels and craft at U.S. Navy facilities overseas shall be handled and disposed of as PCB Items in accordance with the Final Governing Standards (FGS) to be issued under reference (f) or, if FGS have not been issued, in accordance with reference (g) and applicable Status of Forces Agreements unless such cables have been analyzed and shown to contain less than 50 ppm PCBs (average) in the non-metallic parts.

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(2) DRMS activities which are solicited for cable disposal services should be provided with a copy of this Advisory for information.

(3) The Federal regulatory limit of reference (a), which requires management of cables as PCB-materials, is 50 ppm by weight in the non-metal parts of the cable. Local regulatory limits may be lower. In this case, follow the local regulations.

(4) Cables which may contain PCBs:

(a) Manage them in accordance with the requirements for PCB cable in paragraph (5) below, alternately,

(b) Arrange for analysis of the cables to determine whether PCBs are present above the applicable regulatory limit. The nearest Naval Shipyard Environmental Program Office, a Navy Public Works Center, a waste management agent or a local laboratory capable of testing for PCBs should be consulted for assistance if necessary. If PCBs above the regulatory limit are found, manage the cables in accordance with paragraph (5) below (PCB-cables). If found below the regulatory limit, manage the cables in accordance with the paragraph (6) below (cables without PCBs).

(5) Cables which are known by analysis or other information to contain PCBs:

(a) Package, label, store and handle the cables in accordance with the requirements of reference (a) or in accordance with applicable local regulations. Cable should be manifested with the shore facility identified as the waste generator, using the shore facility EPA identification number.

(b) Arrange to sell the cables for recycling. The cable selling agent shall verify that the recycler holds a current EPA permit for storage and/or disposal of PCB materials and is authorized to perform these functions in accordance with applicable local regulations. Assure that applicable manifesting requirements are met. Alternately,

(c) Dispose of the cables as PCB waste, relabeling, repackaging and manifesting them to a permitted PCB waste disposal activity. Ensure that all applicable local regulations are followed.

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(6) Cables with PCBs less than the regulatory limit.

(a) Reuse or recycle the cables, or dispose of the cables in accordance with applicable local regulations for solid waste.

3. The information in this advisory will be incorporated in a future revision of reference (e).

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VIII. Advisories in effect :

<u>PCB ADVISORY NO.</u>	<u>SUBJECT</u>
93-1A	MANAGEMENT OF ELECTRICAL CABLES REMOVED FROM VESSELS AND CRAFT (REVISED)
93-2	MANAGEMENT OF SCRAP METAL GENERATED DURING THE SUBMARINE INACTIVATION, DISMANTLEMENT AND RECYCLING PROCESS

Enclosure (1)

5090  
OPR  
Ser

To all MSRA and ABR  
Contractors under  
SUPSHIP Cognizance

Gentlemen:

This letter is to inform you that some electrical cables aboard Navy vessels and craft have been found to be contaminated with Polychlorinated Biphenyls (PCBs) at levels above 50 parts per million (ppm) by weight. Cables manufactured after 1 January 1984 and all low smoke cables, identified by specifications MIL-C-24643 or MIL-C-24640 as well as by the prefix "LS" in the type designation, are free of PCBs.

Based upon the above, all cable, unless clearly identified as manufactured after the 1 January 1984 date or as low smoke, should be treated as if it is contaminated until proven otherwise by sample analysis. If analysis shows that the cable contains PCBs, it must be handled and disposed of in accordance with the applicable federal, state and local regulations.

The information provided by this letter does not authorize any change in the terms, conditions, delivery schedule, price, or amount of any Government contract/job order. In the event that you consider that this information represents a change under an existing contract/job order, for which an equitable adjustment is in order, you are to advise the Contracting Officer of the particular technical or contractual requirements regarded as changed, and to take no action with regard to such changed requirements until notified, in writing, of the Contracting Officer's response.

Sincerely,

Copy to:  
Code 140  
Code 400  
Other Codes as Applicable.

Enclosure (2)